

DEFINITIONS AND SPECIAL INSTRUCTIONS

1. Scope of survey

This survey covers manufacturers of computers and office and accounting machines. Computers are also referred to as automatic data processing machines.

2. Figures to be reported

Companies with more than one establishment manufacturing the products covered by this survey are requested to complete a separate report form for each location. If you have not received a separate form for each of your establishments, please call the contact shown on the report form or write to the U.S. Census Bureau for additional forms.

a. Quantity and value of shipments

The figures on quantity and value of shipments should include the physical shipments of all products sold, transferred to other establishments within your company, or shipped on consignment, whether for domestic or export sale. The value represents the net sales price, f.o.b. plant, to the customer or branch to which the products are shipped, net of discounts, allowances, freight charges and returns. Shipments to your own branches should be assigned the same value as comparable sales to unaffiliated customers, i.e., the value includes appropriate allocation of company overhead and profit. Products bought and resold without further manufacture should not be included in shipments.

Include shipments of new and completed machines and parts and attachments of office machines which are sold separately. Include machines shipped on consignment as well as to central warehouses and sales branches of your company, whether or not they were sold by the end of the reporting year. Deduct allowances for products returned during the reporting year. *Include* factory rebuilt machines but not those reconditioned or repaired. *Do not include* products manufactured in other plants of your company or products made by other manufacturers which were purchased by you for resale.

Leased machines — For products leased or rented by your company, report the number and estimated values. The estimate should approximate the value of the products sold outright. If no such prices exist, the value may be based on the valuation placed on these items for tax, insurance, or similar purposes.

b. Columnar structure of report

Shipments (item codes 1110—5099)

Column 1 — Number of units

Column 2 — Value excluding excise tax f.o.b. plant (\$1,000)

C. Special instructions

Computer processor subassemblies and processor and other boards for insertion in or use with a complete computer system should be classified in items 1751 through 1790. Generally these products are not encased in a housing, or require further assembly in order to function as a computer system.

Parts — report a component or subassembly in the parts category only if:

- (1) Your company fabricates or assembles the complete item at the reporting location; and
- (2) The item is not explicitly specified within the 10-digit North American Industry Classification System (NAICS)-based product classifications as defined for use in the 5-year Economic Census or Current Industrial Reports (CIR) program.

Exclude:

- Printed circuit boards without componentry (report on CIR Form MA334Q)
- Other electronic componentry (e.g. relays, capacitors, switches, semiconductors; report on CIR Form MA334Q)
- Power supplies (use CIR Form MA334Q)
- Fasteners, stampings, and similar hardware
- Equipment enclosures (also NAICS 3321615361, 332322C101, 332322C206, 332322C311)

Include:

- Other subassemblies not specified elsewhere that are specialized for use only in complete equipment you manufacture.

Please call us (301-763-4777) if you want additional clarification or assistance.

3. Definitions

Host systems (item codes 1110–1195) — Systems that are designed to simultaneously execute instructions from multiple users.

Server appliance (item code 1195) — A low end server dedicated to performing a specific application such as firewalls, security, messaging, etc.

Single-user computers (item codes 1410–1495) — Designed and sold as a single user system—Limited to those systems designed to execute instructions from a single user. User programmable in a high-level language and can independently initiate and operate end user applications. Exclude any special purpose processors such as consumer/financial systems, fixed function devices such as calculators, word/spelling/language processors, note takers, etc.

Tablet computer (item code 1435) — A portable tablet sized computer which operates on Microsoft R Windows R XP Tablet PC Edition. These machines have rich digital ink and handwriting recognition abilities.

Home internet appliance (item code 1495) — A device specifically designed to access the internet and/or e-mail.

Other computers (item 1500) — Include products that are dedicated towards a specific task that is computational in nature. Examples of such products are array processors, database processors, vector processors, and image processors. Usually these processors work on a specific class of tasks in combination with some other computer. Include analog or hybrid computers.

Loaded computer processor boards and board subassemblies for replacement, upgrade, further assembly, or installation in another computer system (including single board computers), by electronics manufacturing services providers/contract assembly companies.

Computer and peripheral printed board assemblies (item code 1751) — Mini-computers, business, personal, main-frames, laptops, key and non-key input, printers, plotters, CRT terminals.

Communications printed board assemblies (item code 1753) — Central office switching equipment transmitters, airborne radio, facsimiles, voice recognition, voice output, modems, carrier interfaces, LAN'S, land mobile, amateur radio, fixed station, microwave, TV broadcast, radio broadcast, terrestrial/satellite navigation, CATV, pagers, smoke/intrusion detectors.

Industrial process control board assemblies (item code 1755) — Controllers, nuclear reactors, inspection and test, energy management, pollution monitoring, temperature controls, geophysical, meteorological, particle escalators, robotics, semiconductor testing.

Instrumentation printed board assemblies, except industrial process (item code 1757) — Test and measurement, oscilloscopes, field recorders, ATE, auto diagnostics, medical instrumentation, diagnostics, therapeutics, radiology, chronomotographs, spectrophotometers, electromechanical analyzers, lasers, avionics instrumentation.

Search and detection printed board assemblies (item code 1759) — Radar tracking, guidance control, airborne/marine ground military communication, electronic warfare, jammers, warning receivers, electro-optics, sonar system surface, sonar sub-surface.

Consumer electronics printed board assemblies (item code 1761) — Radios, television, audio equipment, musical instruments, video players, electronic games, garage door openers, home appliances, watches, clocks, personal electronics, cameras.

Other electronics printed board assemblies (item code 1790) — Calculators, copying machines, cash registers, electronic gaming, gas pump meters, point-of-sale terminals.

Computer storage devices (items 2020–2650) — Equipment for data storage in addition to the main or cache storage of a computer (e.g., disk drives, tape drives). Exclude storage media (e.g. disks, tape), which should be reported as "magnetic and optical recording media" (items 5006–5090).

Computer terminals (items 2680–2860) — General purpose equipment for human-controlled data entry into or interaction with a computer system. Local processing, storage or other intelligence is limited to that required for formatting data for output, display or communication. Exclude personal computers or workstations, which should be reported in items 1410 or 1420. Report point-of-sale terminals in items 4016. (Also see "Computer peripheral equipment, n.e.c.")

Computer peripheral equipment, not elsewhere classified (items 3705–3890) — Exclude devices that can communicate within a computer system but that are designed primarily for some other application that is not primarily computational in nature. For example, exclude equipment designed primarily for measurement or control (3345), communication (3342), health care (3345), machining (3335), or any other specific application.

3. Definitions — Continued

Bar code devices (item 3752) — Equipment for reading an array of rectangular bars and spaces which are arranged in a predetermined pattern following unambiguous rules in a specific way to represent elements of data which are referred to as characters. Includes readers, scanners and decoders.

Magnetic strip (item code 3788) — Records, or encodes, information onto a material, using low or high energy electromagnetic charges. These charges or signals can then be read by a decoder that translates them into numbers and characters for identification by a computer.

Funds transfer devices (item code 4010) — Devices facilitating the handling of various financial transactions involving the consumer and financial institutions. Typically, these devices provide services such as account status inquiries, transfers of funds to and from various accounts, withdrawals, deposits, and payments.

Point-of-sale devices (item code 4016) — Devices facilitating the handling of various retail transactions involving the sale, exchange, or return of merchandise or service.

ABBREVIATIONS AND METRIC CONVERSIONS

cm = Centimeters (cm)

2 inches = 2.54 centimeters (cm)

cm = 0.3937 inches

4. Comparability

Data reported in this survey should correspond to data reported in the Economic Census - Manufacturing Sector form. The sum of values for item codes shown in column (a) should correspond to the dollar values reported under product codes indicated in column (b) below:

Current Industrial Reports (Form MA334R)	Economic Census - Manufacturing Sector
Item codes (a)	Product codes (b)
1110 through 1195	3341111 100
1410 through 1495	3341117 100
1500	334111D 100
1751 through 1790	334418A 100
2020 through 2620	3341121 100
2650	3341124 100
2680 through 2830	3341131 100
2860	3341134 100
3705 through 3884	3341191 100
3890	3341194 100
4010 through 4016	3341197 100
4022 through 4028	3333134 100
4040	3333136 100
4058 through 4077	333313A 100
4084 through 4091	333313D 100
4096	3345183 100
4102 through 4122	333313D 100
4139	333313J 100
5005 through 5090	3346130 100

REFERENCE LIST

FORM MA334R COMPUTERS AND OFFICE AND ACCOUNTING MACHINES (SHIPMENTS)		
Product code	Item code	Item description
		ELECTRIC COMPUTER MANUFACTURING <i>(Report quantity in number of units)</i>
		Host computers (multi-users)
3341111101	1110	Large-scale systems, including mainframes, super computers (general purpose or high-speed scientific)
3341111103	1120	Medium-scale systems (supermini-class) and unix servers
3341111105	1130	PC servers (excluding unix servers)
3341111106	1190	Other host computers
3341111109	1195	Server appliance
		Single-user computers (single-user, microprocessor-based machines capable of supporting attached peripherals)
3341117107	1410	Personal computers
3341117109	1420	Workstations (microprocessor-based single-user systems distinguished from PC's by operating systems and relative-high performance)
3341117111	1430	Laptops (AC/DC)
3341117112	1435	Tablet computer
3341117113	1440	Notebooks, subnotebooks (battery operated)
3341117115	1450	PDA's (personal digital assistants)
3341117117	1460	Other portables (i.e. palmtops)
3341117119	1490	Other single-user computers
3341117125	1495	Home internet appliance
334111D121	1500	Other computers (including array and other analog, hybrid or special purpose computers)
XXX	1599	Total computers (sum of item codes 1110–1500)
		Loaded computer processor boards and board subassemblies for replacement, upgrade, further assembly, or installation in another computer system (including single board computers), by electronics manufacturing services providers/contract assembly companies. <i>(Do not report quantity)</i>
334418A101	1751	Computer and peripheral printed board assemblies
334418A103	1753	Communications printed board assemblies
334418A105	1755	Industrial process control board assemblies
334418A107	1757	Instrumentation printed board assemblies, except industrial process
334418A109	1759	Search and detection printed board assemblies
334418A111	1761	Consumer electronics printed board assemblies
334418A113	1790	Other electronics, printed board assemblies: including office equipment and point-of-sales
XXX	1899	Total loaded computer processor boards and board subassemblies (sum of item codes 1751–1790)

REFERENCE LIST — Continued

FORM MA334R

Product code	Item code	Item description
		COMPUTER STORAGE DEVICES AND EQUIPMENT <i>(Report quantity in number of units)</i>
3341121102	2020	Rigid magnetic disk drives:
3341121109	2170	Disk subsystems and disk arrays for multiuser computer systems
3341121111	2220	Flexible magnetic disk drives
		Optical disk drives, including CD-ROM and magneto-optical equipment:
		CD-ROM:
3341121113	2250	"Juke-box" capable of handling multiple disks
3341121115	2280	Single-disk equipment
3341121116	2320	DVD (including DVD-video, DVD-ROM, DVD-R and DVD-RAM)
3341121118	2360	Magneto-optical (MO)
3341121120	2365	Other optical
3341121121	2370	Optical subsystems for multiuser computer systems
3341121124	2410	Auxiliary storage, not disc- or tape-based, for multiuser computer systems:
3341121127	2470	Other direct access storage equipment
		Serial access storage equipment (e.g., tape drives):
3341121129	2500	1/2 inch tape drives
3341121131	2530	1/4 inch tape drives
3341121133	2560	Helical scan tape drives
3341121135	2590	Cassette tape drives
3341121137	2620	Other serial access storage equipment
XXX	2629	Total computer storage devices and equipment (sum of item codes 2020–2620)
3341124101	2650	Computer storage parts and subassemblies (see instructions)
		COMPUTER TERMINALS <i>(Report quantity in number of units)</i>
3341131101	2680	Remote batch terminals
3341131103	2710	Teleprinters
		Display terminals, including graphics type, whether or not incorporating a printing mechanism:
3341131105	2740	X-terminals
		Other than X-terminals:
3341131107	2770	13 inch or less display
3341131109	2800	More than 13 inch but less than 19 inch display
3341131111	2830	19 inch or more display
XXX	2839	Total computer terminals (sum of item codes 2680–2830)
3341134101	2860	Computer terminal parts and subassemblies (see instructions)

REFERENCE LIST — Continued

FORM MA334R		
Product code	Item code	Item description
		COMPUTER PERIPHERAL EQUIPMENT, N.E.C. (Report quantity in number of units)
		Input devices:
3341191100	3705	Digital cameras
3341191101	3710	Keyboards
3341191102	3712	Memory cards and readers
3341191103	3716	Other keying equipment
3341191105	3722	Mouse devices
3341191107	3728	Digitizers and light pen tablets
3341191109	3734	Other manual input devices (joysticks, trackballs, touchscreens, etc.)
3341191111	3740	Computer output to microfilm (COM) equipment
3341191113	3746	Media copying and/or conversion equipment
		Optical scanning devices:
3341191115	3752	Bar code devices
3341191117	3758	OCR equipment
		Other than bar code or OCR devices:
3341191119	3764	Flat bed scanners
3341191120	3767	Drum scanners
3341191121	3770	Hand-held scanners
3341191122	3773	Photo scanners
3341191123	3776	Other
3341191125	3782	Voice recognition equipment
3341191127	3788	Magnetic strip and ink recognition equipment
3341191129	3794	Other document entry equipment
		Computer printers:
		Impact printers
3341191131	3800	Line type (typically with a Centronics interface with output measured in line per minute)
3341191133	3806	Serial type (typically with a serial and/or parallel interface with output measured in characters per second)
		Nonimpact printers:
3341191135	3820	Laser
3341191137	3822	Inkjet
3341191139	3824	Other (thermal, ion deposition, etc.)
3341191141	3830	Peripheral sharing devices
3341191143	3836	Font cartridges
3341191145	3850	Plotters (including electrostatic)
		Monitors (excluding terminals):
3341191147	3854	Flat panel displays
		Other than flat panel displays (e.g., CRT)
3341191149	3860	Less than 19 inch display
3341191151	3866	19 inch or more display
3341191153	3872	Monitor screen projection devices (e.g., LCD panels)
3341191155	3878	All other input/output devices
3341191157	3884	Accessories for computer peripherals (e.g., device supports, ergonomic aids, etc.)
XXX	3889	Total computer peripheral equipment, n.e.c. (sum of item codes 3705–3884)
3341194101	3890	Parts and subassemblies for computer peripherals and input/output equipment (see instructions)

REFERENCE LIST — Continued

FORM MA334R		
Product code	Item code	Item description
		CALCULATING AND ACCOUNTING MACHINES <i>(Report quantity in number of units)</i>
3341197103	4010	Funds transfer devices
3341197107	4016	Point-of-sale terminals
3333134115	4022	Machines for sorting, wrapping, counting, changing or dispensing coins and/or currency
3333134125	4028	Other coin or currency handling machines, including cash registers, calculators, accounting, bookkeeping and billing machines, and credit card imprinters
XXX	4029	Total coin and currency handling machines, cash registers, accounting, calculating, bookkeeping, and billing machines (sum of item codes 4010–4028)
3333136100	4040	Parts for calculating, coin or currency handling, and accounting machines
		MAILING, LETTER HANDLING, AND ADDRESSING MACHINES <i>(Report quantity in number of units)</i>
333313A101	4058	Forms handling equipment, including bursters, decollators, and imprinters
333313A105	4070	Letter and envelope handling machines
333313A107	4077	Other mailing, letter handling and addressing machines
XXX	4079	Total mailing, letter handling, and addressing machines (sum of item codes 4058–4077)
		ALL OTHER OFFICE MACHINES, N.E.C. <i>(Report quantity in number of units)</i>
333313D101	4084	Check handling machines
*333313D104	4091	Electronic staplers
3345183131	4096	Time recording and time stamp machines
333313D105	4102	Paper cutting machines and apparatus, office type
333313D106	4106	Pencil sharpeners
333313D107	4108	Paper shredders
333313D108	4114	Perforating or stapling machines, nonelectric
333313D110	4122	All other office machines, not elsewhere classified, including typewriters, dictating machines, binding machines, ticket counting machines, voting machines and duplicating machines
XXX	4129	Total all other office machines, n.e.c. (sum of item codes 4084–4122)
333313J100	4139	PARTS FOR OFFICE MACHINES, NOT ELSEWHERE CLASSIFIED (N.E.C.) <i>(Report value only)</i>

* New for 2002

REFERENCE LIST — Continued

FORM MA334R		
Product code	Item code	Item description
		MAGNETIC AND OPTICAL RECORDING MEDIA (report drives under 35721) <i>(Report quantity in thousands of units)</i>
		Rigid disks:
3346131111	5005	Less than 3 1/2 inch
3346131211	5018	3 1/2 inch up to but not including 5 1/4 inch
3346131213	5024	5 1/4 inch and greater
		Flexible disks:
3346131611	5030	3 1/2 inch up to but not including 5 1/4
3346131613	5036	5 1/4 inch and greater
3346131615	5042	Optical disks
3346131501	5048	Bulk magnetic tape
		Packaged magnetic tape:
3346131411	5054	In reels for computer use
3346131413	5060	In cassette and cartridge for computer
3346131415	5066	In forms suitable for audio use
3346131417	5072	In video cassette, 8 mm and 1/2 inch
3346131419	5078	In video cassette, 3/4 inch (19 mm) and 2 inch (51 mm)
3346131421	5084	Other package magnetic tape
3346131617	5090	Other magnetic recording media, including parts
XXX	5099	Total magnetic and optical recording media and parts (Sum of item codes 5006–5090)
		SELECTED NONMANUFACTURING REVENUES OF THIS ESTABLISHMENT <i>(Do not report quantity)</i>
4216900000	9110	Sales of products bought and sold and resold without further manufacture, processing or assembly
9999980000	9140	Research and development, testing and evaluation of systems and components
		Software sold with computer systems shipped by manufacturers:
3346110001	9170	Operating system software
3346110002	9200	Utilities and device managers
3346110003	9230	Application software
3346110004	9260	Other software
5415120000	9290	Systems integrated system design revenues, including configuration, installation and site preparation, custom computer programming services
5415190000	9320	Other miscellaneous receipts